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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,223	02/24/2000	Martin Miehl	104142	5686

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EXAMINER
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DINH, TUAN T

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/512,223

Applicant(s)

MIEHLING, MARTIN

Examiner

Tuan T Dinh

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 16-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. The request filed on 10/21/02 Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/512,223 is acceptable and a RCE has been established. An action on the RCE follows.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoppe et al. (Reference cited by applicant) in view of Ring et al. (U. S. Patent 5,856,378).

**As to claim 1**, Hoppe discloses an electrical circuit (1-figure 1, column 3, line 16) as shown in figures 1-5 comprising:

an integrated circuit (3-figure 2b, column 3, line 18),

an antenna (17-figure 2b, column 4, line 20),

one or more electrical connections (25-figure 2b, column 4, lines 24-25) between the integrated circuit (3) and the antenna (17), and

wherein at least the integrated circuit and the antenna are encapsulated within a capsule (15, column 3, lines 30-36, 58-64, column 4, lines 18-24) such that the capsule

(15) mechanically connects the integrated circuit (3) and the antenna (17) the hold the integrated circuit and antenna in a fixed position relative to each other.

Hoppe does not teach a thermoplastic resin having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar.

Ring shows a thermoplastic resin material having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar (column 43, lines 20-24, column 44, lines 61-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a thermoplastic resin having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar as taught by Ring to modify the electrical circuit of Hoppe in order to seal and protect a chip without causing break down under mechanical and electrostatic of components within the electrical circuit

**As to claim 2**, Hoppe discloses an electrical circuit as shown in figure 5 wherein the capsule (15) completely encapsulates the electrical circuit (see figure 5b).

**As to claim 3**, Hoppe discloses an electrical circuit as shown in figure 5 wherein the capsule (15) encapsulates the electrical circuit only on one surface of the electrical circuit (see figure 5b).

**As to claim 4**, Hoppe discloses an electrical circuit as shown in figures 1-5 wherein the electrical circuit is encapsulated within the capsule (15) such that at least one or more electrical connections are encapsulated by the thermoplastic resin (see figure 5b).

**As to claim 5**, Hoppe discloses an electrical circuit as shown in figures 1-5 wherein the antenna is a coil (17, column 4, line 20).

**As to claims 6 and 7**, Hoppe discloses a data carrier capable of being a transponder as shown in figures 1-5 comprising:

an electrical circuit (1) containing at least one component (3) suitable for interaction with an electromagnetic field (coil 17) encapsulated within a capsule (15),

and wherein the electrical circuit is encapsulated by the thermoplastic resin such that at least an integrated circuit (3) and an antenna (17) of the electrical circuit are encapsulated by the thermoplastic resin.

Hoppe does not teach a thermoplastic resin consisting essentially of thermoplastic polyamide having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar.

Ring shows a thermoplastic resin material, which is thermoplastic polyamide having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar (column 43, lines 20-24, column 44, lines 61-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a thermoplastic resin having a melting point of from 120°C to 250°C and a processing pressure of from 5-40 bar as taught by Ring to modify the electrical circuit of Hoppe in order to seal and protect a chip without causing break down under mechanical and electrostatic of components within the electrical circuit.

**As to claims 8-10**, Hoppe discloses a transponder as shown in figures 1-5 wherein at least part of a surface of the capsule is covered with a cover layer of

laminated film, said laminated film comprises a plastic material as well as PCV material (35, 37, column 5, line 23).

**As to claim 11**, Hoppe discloses a transponder as shown in figures 1-5 wherein the antenna is a coil (17).

**As to claim 12**, Hoppe discloses a transponder as shown in figures 1-5 wherein the electrical circuit (1) further comprises one or more electrical connections (25) connecting the integrated circuit (3) in electrically conducting fashion with the antenna (17-see figure 5b).

**As to claim 13**, Hoppe discloses a transponder as shown in figures 1-5 wherein the capsule (15) further comprises at least one supporting element (37) projecting from surface of integrated circuit (3).

**As to claim 14**, Hoppe discloses a transponder as shown in figures 1-5 wherein the capsule (15) includes a material used as a mold during encapsulation with the thermoplastic resin (column 3, lines 30-31).

**As to claim 15**, Hoppe discloses a transponder as shown in figures 1-5 wherein the transponder further comprises a sheath (35; 37) of injection-molded resin surrounding the encapsulated electrical circuit.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-308-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-9560.

TD  
November 2, 2002.

  
ALBERT W. PALADINI  
PRIMARY EXAMINER